how far they will affect the value of the results to be obtained from the observations will not be disclosed until we know what questions the services want us to answer. From the scientific point of view the discontinuity of hour introduces a defect which is fatal and for which

there is no remedy.'

74. Sir Napier Shaw concludes: "We have got through the immediate difficulties of Summer Time by making special provision of one sort or other to meet com-plaints addressed to us. For the future, if the experi-ment of 1916 is repeated, the proper course will be again to keep continuity as far as possible and make good the requirements of the service by whatever special provision we can devise and carry out."

75. We do not feel that we can add anything to Sir Napier Shaw's statement; but we may, perhaps, express the hope that the proposal for a permanent acceleration by one hour of the international service of weather reports (which we are told is not impossible to carry out, although it involves certain difficulties) will receive

further consideration.

Foreign countries.

[The replies to circulars sent to foreign countries, and information supplied by the War Trade Intelligence

Department, indicate that]-

78. Daylight-saving schemes were adopted last year [1916-17] by France, Holland, Denmark, Norway, Sweden, Italy, Portugal, and in Germany and Austria. The schemes were started on various dates from the 1st of May onward, and terminated for the most part at the end of September, the only exception apparently being in Portugal, where summer time was continued until the 31st of October. The variation from normal time seems to have been one hour in every case.

79. [According to the reports Great Britain (excluding Ireland), France, Holland, Portugal, Germany, and Austria, favored repeating the experiment in 1917; Denmark and Sweden were apparently undecided; Italy and

Spain yielded no information.]
83. [Daylight-saving schemes have been adopted in Australia and Tasmania, and locally in Canada (Saint John, N. B.); New Zealand rejected the bill, and the Union of South Africa has not adopted a scheme.]

Conclusion.

84. We recommend, therefore, that Summer Time should be reintroduced in 1917 and in subsequent years.

RAINFALL OF 1917 IN THE BRITISH ISLES.

[Reprinted from Nature, London, Feb. 14, 1918, 100: 472.]

The rainfall of 1917 in the British Isles was about the average, but large areas of deficient rainfall occurred in all parts of the country. According to Symons's Meteorological Magazine for January (vol. lii, No. 624) the most important of these areas were in the center, part of the north, and the southwest of England, all of which had deficiencies of more than 10 per cent. The east midlands of Scotland were also dry, the deficiency exceeding 20 per cent over an area extending from the Firth of Forth to the Grampians. The southern half of Ireland and the extreme north and the south of Wales had a rainfall below the average. Unusually wet regions included the west and north of Scotland, the north of Ireland, the Yorkshire Wolds, Cardigan Bay, and the London district. August, October, and November showed a general excess of rainfall over the country. May was rather wet in Ireland and June in England, especially locally. February and December were unusually dry, and there was, on the whole, a general deficiency of rainfall during the first seven months of the

WEATHER AND HONEY PRODUCTION.

By L. A. KENOYER.

[Abstract reprinted from U. S. Experiment Station Record, Washington, 1917, 37:854.]

The author here reports studies, based on daily records for 29 years, kept by a successful beekeeper, as to the weight of a hive of bees and the accompanying weather conditions. These show that changes in the weather exert a marked influence on the production of honey. The conclusions drawn are as follows:

"June yields 56 per cent of the annual hive increase and July about half of the remainder. A large June increase is indicative of a good honey year. There is an evident alternation between good and poor years. A good year has a rainfall slightly above the average, the honey season being preceded by a fall, winter, and spring with more than the average precipitation. A rainy May scarcely fails to precede a good honey season. South wind seems favorable and east wind unfavorable.

"The yield shows a gradual depression preceding and a gradual increase until about the fourth day following a rainy day, after which it remains fairly constant until about the fourteenth day following the rain. Good honey months average slightly higher in temperature than poor, this being especially true of the spring and fall months. Clear days are favorable to production of honey. Yield is best on days having a maximum of 80 to 90° F. and a wide daily range of temperature is favorable. able for a good yield. A low barometer is also favorable for good yield. The fluctuations in yield for a producing period seem to be closely correlated with the temperature range and the barometric pressure, acting jointly. A cold winter has no detrimental effect on the yield of the succeeding season, but a cold March reduces it. A winter of heavy snowfall is in the great majority of cases followed by a larger honey yield."

FORMER WEATHER BUREAU OFFICIAL IN NAVAL RESERVE FLYING CORPS.

A communication from the Office of Naval Operations, United States Navy, dated March 4, 1918, informs the Weather Bureau that former Professor of Meteorology and District Forecaster Alexander George McAdie, recently of Harvard University and Blue Hill Observatory, was enrolled in the Naval Reserve Flying Corps with the rank of lieutenant commander, on February 1, 1918, and is shortly to go abroad in connection with the meteorological branch of the Naval Air Service.

Lieutenant Commander McAdie's name is therefore to be added to the list of meteorologists given by Prof. R. De C. Ward, at the top of page 592 in the REVIEW, December, 1917. All who had the pleasure of an acquaintance with former Prof. McAdie will surely

wish him great success in his new undertaking.

¹ See Bulletin, Iowa State experiment station, 1917, 169:15-26, fig.